

-- 17. The emulsion according to Claim 16 wherein the peroxide is selected from the group consisting of peroxyesters, peroxydicarbonates, peroxyarbonates, diacyl peroxides, and combinations thereof, and in which said peroxide is present in an amount of 30-70% by weight, based on the weight of the emulsion.--

-- 18. The emulsion according to Claim 17 comprising one or more peroxides which require refrigerated storage and are present in an amount of 40-65% by weight, based on the weight of the emulsion. --;

-- 19. The emulsion according to Claim 18 further comprising an anti-freeze selected from the group consisting of methanol, ethanol, isopropanol, ethylene glycol, propylene glycol, and glycerol. --;

-- 20. The emulsion according to any one of the Claims 16-19 wherein the copolymer is present in an amount of 0.05 to 20% by weight and the ethoxylated fatty alcohol is present in an amount of 0.02-15% by weight, with the proviso that the total weight of both compounds is at least 0.5% by weight, all based on the weight of the peroxide in said emulsion. --;

-- 21. The emulsion according to claim 20 wherein the copolymer is present in an amount of 0.1-15% by weight, based on the weight of the peroxide. --;

-- 22. The emulsion according to any one of the Claims 16-19 wherein the HLB value of the ethoxylated fatty alcohol is greater than 16.5. --;

-- 23. The emulsion according to any one of Claims 16-19 wherein the droplet size of the emulsion, when measured using a Malvern Easy Sizer, is characterized by a d50 of 0.1-2.0  $\mu\text{m}$  and a d99 of 0.5-9.0  $\mu\text{m}$ .--;

-- (24). The emulsion according to any one of Claims 16-19 wherein the ingredients are chosen in such a way that a viscosity between 10-300 mPa.s is obtained. --;

-- 25. A polymerization process comprising polymerizing a monomer in the presence of an emulsion according to any one of Claims 16-19 or a polymerisation modification process comprising treating a polymer with an emulsion according to any one of Claims 16-19. --;

-- 26. Polyvinyl chloride obtained by a process involving the reaction of at least vinyl chloride monomer and peroxide that was used in the form of an emulsion according to any one of Claims 16-19. --;

-- 27. The emulsion according to Claim 17 wherein the peroxide selected from the group consisting of peroxyesters, peroxydicarbonates, peroxycarbonates, diacyl peroxides, and combinations thereof, requires refrigerated storage and is present in an amount of 50-65% by weight, based on the weight of the emulsion. --;